

REMARKSI. Status of the Claims

Claims 1-12 are pending. Claim 2 is canceled and claims 1, 5, and 9 are amended in this response. Upon entry of the amendment, claims 1 and 3-12 will remain for consideration.

II. Objection to the Specification

At the Examiner's request, Applicants have amended the specification to recite proper section headings in accord with Rule 77(b). The objection should be withdrawn.

III. Response to the Section 102(b)/103(a) Rejection Based on Jejelowo

Applicants traverse the rejection of claims 1-6, 8-10, and 12 under 35 U.S.C. § 102(b), or in the alternative, under 35 U.S.C. § 103(a) as unpatentable over WO 98/10542 ("Jejelowo"), and they respectfully ask the Examiner to reconsider and withdraw the rejection in view of their amendment and the following remarks.

Jejelowo discloses a process for preparing a trimethylaluminum (TMA)-treated silica support substantially as recited in the Office action. In particular, 400 g of silica is treated with 3380 mL of a 10 wt.% solution of TMA in isopentane. This equates to  $3380 \text{ mL} \times 0.10 = 338 \text{ mL}$  of TMA. Because TMA has a density of about 0.75 g/mL, the amount of TMA used is  $338 \text{ mL} \times 0.75 \text{ g/mL} = 254 \text{ g}$  of TMA. Thus, the amount of TMA is given by:  $254 \text{ g TMA} / 400 \text{ g silica} = 63.5 \text{ wt.}\%$  based on the amount of silica.

As amended, Applicants' pulverulent solid can have no more than 40 wt.% metal alkyl based on the amount of support, so Jejelowo fails to anticipate the claims. Moreover, a skilled person has no reason to expect that using Jejelowo's high level of metal alkyl would provide satisfactory results for Applicants' application. In fact, the skilled person would have no incentive to use so much metal alkyl if less can be used with acceptable performance. The Examiner should reconsider and withdraw the rejection.

IV. Response to the Section 102(b)/103(a) Rejection Based on SU 409723

Applicants traverse the rejection of claims 1, 3, 5, and 6 under 35 U.S.C. § 102(b), or in the alternative, under 35 U.S.C. § 103(a) as unpatentable over SU 409723,

and they respectfully ask the Examiner to reconsider and withdraw the rejection in view of their amendment and the following remarks.

SU 409723 teaches to treat calcined silica with an alkylaluminum compound in isopentane. The Examiner correctly inferred that isopentane is separated from the treated adsorbent, which is then used in a column to remove traces of water, oxygen, and other impurities from nitrogen, hydrogen, and other gases. The amount of alkylaluminum compound used to treat the silica is 50 g/kg of silica, or 5 wt.%.

Applicants have amended their claims to require 10-40 wt.%, based on the amount of support, of the metal alkyl, so SU 409723 does not anticipate Applicants' claims. Nor would a skilled person expect that an amount of metal alkyl two to eight times less than the amount now claimed would necessarily provide equivalent results in making pulverulent solids with good powder flow properties.

Because Applicants' claimed metal alkyl-treated solid, process for making it, and process for using it in an olefin polymerization meet the patentability requirements of the statutes, the Examiner should reconsider and withdraw the rejections.

#### V. Conclusion

Applicants respectfully ask the Examiner to withdraw the rejections and pass the case to issue. Applicants invite the Examiner to telephone their attorney at (610) 359-2276 if he believes that a discussion of the application might be helpful.

---

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, P.O. Box. 1450, Alexandria, VA 22313-1450 on June 22, 2009

Jonathan L. Schuchardt  
Name of person signing

  
Signature

---

Respectfully submitted,  
Shahram Mihan et al.

By:   
Jonathan L. Schuchardt  
Reg. No. 34,428  
Attorney for Applicant(s)  
LyondellBasell Industries  
3801 West Chester Pike  
Newtown Square, PA 19073  
Phone (610) 359-2276  
Customer Number 24114  
June 22, 2009